

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512



December 27, 2001

Mr. Kelly Lucas  
Executive Director  
SUNRISE POWER COMPANY  
P.O. Box 81617  
Bakersfield, CA 93380-1617

SUBJECT: **Sunrise Power Project (98-AFC-4C)**  
**Approval of Modifications to Cond. of Certification AQ-10, -14 & -15**

Dear Mr. Lucas:

California Energy Commission (Energy Commission) staff reviewed your petition received on December 14, 2001 for the Sunrise Power Project to modify air quality Conditions of Certification AQ-10, -14, and -15 in order to clarify and resolve potential conflicts between these conditions concerning continuous emission monitoring and reporting.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we have expedited review of the petition. Energy Commission staff have concluded that the requested changes to AQ-10, -14, and -15 have no potential for adverse environmental or public health and safety impacts, and have approved the changes noted below.

**APPROVED CHANGES TO AIR QUALITY CONDITIONS OF CERTIFICATION**

Deleted text is in ~~strikeout~~ and new text is underlined.

**AQ-10** Startup is defined as the period beginning with turbine initial firing until the unit meets the lbs/hr and ppmvd emission limits in Condition **AQ-15**. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown duration shall not exceed a time period of ~~40 minutes~~ 4 hours each per occurrence. [District Rule 2201 and 4001]

**Verification:** Please refer to Condition **AQ-31**.

**AQ-14** During startup or shutdown of any combustion turbine generator(s), combined emissions from the two CTGs (S-3746-1 and '-2) shall not exceed the following:

**For simple cycle mode of operation**

NO <sub>x</sub>	145.24 lbs in any one hour
CO	364.86 lbs in any one hour

**For combined cycle mode of operation**

NO<sub>x</sub> 700 lbs in any one hour  
CO 1,580 lbs in any one hour

Protocol: If any unit is in either startup or shutdown mode during any portion of a clock hour, the facility will be subject to AQ-14 limits during that clock hour.

**Verification:** The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-31**.

**AQ-15** Emission rates from each CTG, except during startup and shutdown events, shall not exceed any of the following:  
[District Rules 2201, 4001, and 4703]

**While operating in simple cycle mode:**

PM<sub>10</sub> 9 lbs/hr  
SO<sub>x</sub> (as SO<sub>2</sub>) 3.85 lbs/hr.  
NO<sub>x</sub> (as NO<sub>2</sub>) 60.93 lbs/hr.  
9.0 ppm  
VOC 2.81 lbs/hr.  
1.3 ppm  
CO 29.14 lbs/hr.  
7.5 ppm

NO<sub>x</sub> (as NO<sub>2</sub>) emission mass and concentration emission limits are is a one-hour rolling averages. All other emission mass and concentration emission limits are three-hour rolling averages.

**While operating in combined cycle mode:**

PM<sub>10</sub>: 17.8 lbs/hr  
SO<sub>x</sub> (as SO<sub>2</sub>): 1.55 lbs/hr  
NO<sub>x</sub> (as NO<sub>2</sub>): 15.96 lbs/hr and 2.0 ppmvd @ 15% O<sub>2</sub>  
VOC: 5.51 lbs/hr and 2.0 ppmvd @ 15% O<sub>2</sub>  
CO: 19.22 lbs/hr and 4.0 ppmvd @ 15% O<sub>2</sub>  
Ammonia: 10 ppmvd @ 15% O<sub>2</sub>

NO<sub>x</sub> (as NO<sub>2</sub>) emission mass and concentration emission limits are is a one-hour rolling averages. Ammonia emission concentration limit is a 24-hour rolling average. All other emission mass and concentration emission limits are three-hour rolling averages.

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Protocol: Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a 3-hour rolling average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. 24-hour average emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. If a unit is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to AQ-15 limits during that clock hour.  
[District Rule 2201]

**Verification:** The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-31**.

A copy of this letter and staff analysis will be posted on the Energy's Commission website at [www.energy.ca.gov](http://www.energy.ca.gov), and we will file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse. If you have any questions, please contact Nancy Tronaas, Compliance Project Manager, at (916) 654-3864, or by e-mail at [ntronaas@energy.state.ca.us](mailto:ntronaas@energy.state.ca.us).

Sincerely,

ROBERT L. THERKELSEN, Deputy Director  
Systems Assessment & Facilities Siting

cc: Mervyn Soares, Sunrise Power Company  
Tom Goff, San Joaquin Valley Air Pollution Control District  
Joe Loyer, Energy Commission  
Nancy Tronaas, Energy Commission